



Engineering
Standards
Data

MICROWAVE ASSOCIATES, INC.

SEMICONDUCTOR DIVISION

BURLINGTON, MASSACHUSETTS
Western Union 542-1702, Burlington, Mass. 042-1702-3000

DIFFUSED
SILICON MESA
COMPUTER
DIODES



SUBMINIATURE FAST SWITCHING HIGH CONDUCTANCE SILICON DIODE

IN921

These diodes are designed for use in high-current pulse circuits including memory core drivers, clamps, gates and logic circuits. Low values of forward voltage drop, junction capacitance, and reverse current allows greater flexibility in circuit design, especially where large numbers of diodes are required.

MAXIMUM RATINGS @ 25°C

	SYMBOL	MIN	MAX	UNITS
Average Forward Current @ 25°C			250	mA
Peak Surge Current	I_{surge}		750	mA
Reverse Voltage Steady-State DC	V_R		70	Vdc
Power Dissipation	P		400	mW
Operating & Storage Temperature Range	T	-65	+175	°C
Derating above 25°C (free air)			2.7	$\text{mW}/^{\circ}\text{C}$

ELECTRICAL SPECIFICATIONS @ 25°C

TEST	TEST CONDITIONS	SYMBOL	MIN	MAX	UNITS
Forward Voltage Drop	$I_F = 500 \text{ mA}$	V_F	0.7	1.00	Vdc
Reverse Current	$V_R = -60 \text{ V}$ $T = 150^{\circ}\text{C}$	I_R I_R	.25 50	μA	μA
Capacitance*	$V_R = -9 \text{ V}$	C_9		7.5	pf
Recovery Time	$I_F = 500 \text{ mA}$ switched to $V_R = -50 \text{ V}$ through 1000 ohm loop to 5 ma.	t_{rr}		.3	$\mu\text{sec.}$

* Average case capacitance is 0.30 pf.

These specifications are in accordance with MIL-S-19500B.

All specifications listed herein are subject to modification.

